



THE ATMOSPHERIC RESERVOIR

Examining the Atmosphere and Atmospheric Resource Management

Bowman, Stanley radar data available live!

by Bruce Boe

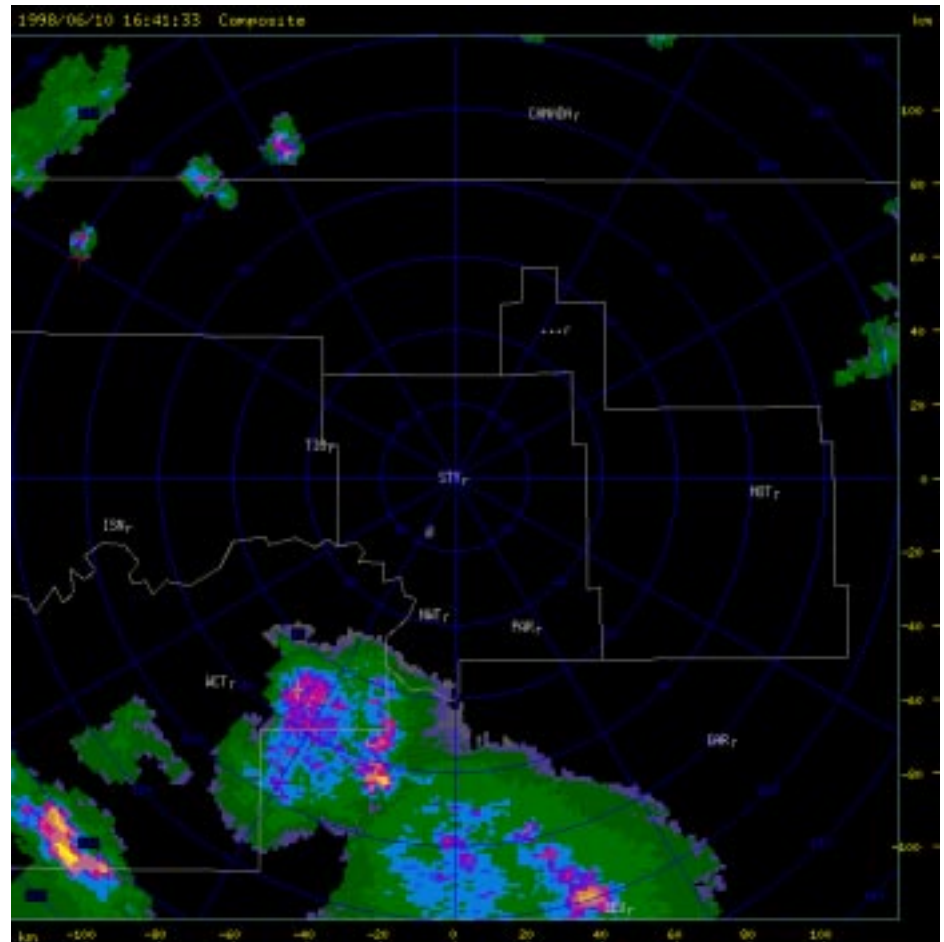
Weather radar data are now available on the Internet from Atmospheric Resource Board radars located in Bowman and Stanley. The images, updated every 15 minutes during periods of active weather, are centered on the each radar's location, and extend roughly 100 miles in all directions. To access the data, go to the Atmospheric Resource Board Home Page at <http://www.swc.state.nd.us/ARB/>.

The displayed images are horizontal cross sections, presented as "maps" of storm location and intensity; the same type display typically shown on television. When several radar images are viewed in succession, storm motion and development can be observed.

When viewing these maps, there are several things you should remember. First, radars are good at detecting precipitation, but not very efficient at detecting clouds, especially higher, colder clouds comprised mostly of ice crystals. Therefore, you should not be alarmed if you observe clouds near these radars, and the radars themselves do not show the cloudiness.

In some circumstances, a storm may appear to lose strength when another storm moves between it and the radar. . .but the more distant storm may not actually be weakening, the radar beam may just be partially blocked by the closer storm!

While the primary function of these radars is to provide guidance to cloud seeding operations within the



The outlines of McKenzie, Mountrail, Williams, and Ward County target area are shown in this image recorded by the Stanley radar on June 10, 1998, at 4:41 p.m. CDT. The image is centered on the Stanley radar. Thunderstorms can be seen in southern McKenzie County and northern Dunn County.

nearby sponsoring counties, these facilities also provide valuable severe weather monitoring services. This is especially true of the Bowman radar, which covers portions of southwestern North Dakota, northwestern South Dakota, and eastern Montana not covered at all by National Weather Service radars.

As you check out the storms this summer, the above characteristics can be observed. With time and

practice, you'll become better at interpreting the images. Comments and questions about the images should be directed via e-mail to: dlanger@water.swc.state.nd.us ■

Atmospheric Resource Board
North Dakota State Water Commission
900 East Boulevard, Bismarck, ND 58505
701) 328-2788
Internet: <http://www.swc.state.nd.us/ARB/>
ND Weather Modification Association
PO Box 2599, Bismarck, ND 58502
701) 223-4232